

REMARKS

By this Amendment, claims 1-2, 4-6 and 8-13 are amended. Claims 3-4 and 7 remain in the application. Thus, claims 1-13 are active in the application. Reexamination and reconsideration of the application are respectfully requested.

In item 13 on page 2 of the Office Action, claims 1 and 5-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hurtado et al. (U.S. 6,418,421) in view of Hall et al. (U.S. 5,920,861) and Iijima (U.S. 5,515,532) and further in view of Nishikawa (U.S. 6,421,685).

The Applicants thank the Examiner and Examiner Sheikh for kindly conducting the interview with the Applicants' representatives on December 19, 2005. In the interview, the Applicants' undersigned representative described the novel features of the present invention and presented arguments indicating why the applied combination of references fail to disclose or suggest each and every limitation of the independent claims. The Examiner and the Applicants' undersigned representative did not come to an agreement with respect to the claims, but the Examiner indicated that he would reconsider the rejection of the claims upon the filing of this Amendment.

The following is a detailed discussion of the issues presented in the interview. The Applicants respectfully traverse the above rejection for the following reasons.

(1) Features of the Present Invention

The present invention provides a novel improvement for allowing a content, such as a compressed audio content having a long playback period, to be moved together with its usage rule information even if the content is divided into a plurality of parts and stored in a plurality of files. In particular, the present invention is related to moving a compressed audio content using variable-length coding together with its usage rule information, where the content is stored in a plurality of files.

When "moving" a content, it is required to delete the content from the original storage location. Thus, the process of "moving" a content is different from a process generally referred to as "copying," where the content is transferred to another storage location but also remains in its original storage location. Accordingly, if a content is moved together with usage rule information and the content is duplicated through a check-out performed in compliance with the usage rule information, the duplicated

content is not deemed to be a secondary copy. Consequently, the copyright of the content is not violated.

In the case where the content to be moved is a music content, for example, whose playback time is relatively long, it is desirable to divide the content into a plurality of object files. As a result of dividing a content to be moved into a plurality of object files, a distribution medium may store object files containing the divided parts of the content, along with an object file containing a content in its entirety. However, in this case, it is difficult to determine which object files contain the divided parts of the content that need to be moved.

To solve this problem, one aspect of the present invention provides a rule management file containing a plurality of rule entries which are in one-to-one correspondence with the object files. Each rule entry includes control information and authorization information of a corresponding object file. Further, each rule entry also includes a content identifier identifying a content from which a corresponding object file is derived.

Thus, the content to which an object file corresponds is readily identifiable. With this feature, even in the case where one content is divided into a plurality of object files on a distribution medium, when the content is to be moved, the plurality of object files that together comprise the content can be moved as a set together with the corresponding usage rule information.

Accordingly, the present invention provides that one content may be divided into a plurality of object files and still be “moved” collectively. With this advantageous feature of the present invention, user convenience is improved without violating the copyright of the content.

(2) Content Dividing According to the Present Invention

With reference to Figures 14 and 26, the following is a description of how a content is divided according to the present invention. Figure 14 shows an example in which a content “Song D” is divided into four files, Track D(1/4), Track D(2/4), Track D(3/4) and Track D(4/4). The song D has a playback time of 30.6 minutes and is thus divided into (8.4 + 8.4 + 8.4 + 5.4-minute) parts that are each included in different AOB (object) files. AOB#4 has a playback time of 8.4 minutes and is the first (or head) part of

the song D. AOB#5 and AOB#6 are middle parts of the song D and each has a playback time of 8.4 minutes. AOB#7 is the end part of the song D and has a playback time of 5.4 minutes.

As a result of a process called “dividing” according to the present invention, the content having a certain length of playback time (e.g., 30.6 minutes) is divided into parts where each part has a playback time of no more than 8.4 minutes.

As shown in Figure 14, the plurality of object files of the present invention containing divided parts of one content are supported by the files “AOB004.SA1,” “AOB005.SA1,” “AOB006.SA1” and “AOB007.SA1” containing object files AOB#4, AOB#5, AOB#6 and AOB#7, respectively.

The rule management file of the present invention is supported by the “AOB SA1.URM” file shown in Figure 26 and the relevant description thereof in the specification. The plurality of usage rule entries of the present invention are supported by the “Usage Rule Entries #4-#7” as also shown in Figure 26. It should be noted that the usage rule entries #4-#7 correspond to the files “AOB004.SA1,” “AOB005.SA1,” “AOB006.SA1” and “AOB007.SA1,” respectively. The content identifier of the present invention included in each rule entry is supported by the content ID included in usage rule entry #1 as shown in Figure 26 and its relevant description in the specification.

The usage rule information of the present invention contained in each rule entry is supported by the Move Control Information and Check-Out Control Information that are both contained in the usage rule entry #1 as shown in Figure 26.

With reference to Figures 14 and 26, suppose the content (song D) having a playback time of 30.6 minutes is divided into four parts having playback times of 8.4 + 8.4 + 8.4 + 5.4 minutes and is stored in four different object files. In this case, usage rule entries #4-#7 corresponding to the respective object files are recorded into the file AOB SA1.URM. Each of the usage rule entries #4-#7 contains usage rule information, together with a content ID identifying the original content (song D). The usage rule information includes Move Control Information and Check-Out Control Information. This arrangement makes it possible to readily identify a content and a usage rule to which each object file containing a divided part of the content corresponds.

In the above-described manner, the content (song D) is recorded onto a distribution medium in order to be “moved” from a first receiving apparatus to a second receiving apparatus. Here, although the content originally has a relatively long playback time, the content is divided into a plurality of parts. Thus, a time search table of each divided part of the content is restricted to a small size.

The time search table shows, as entries, a plurality of read addresses of a content (or a divided part of a content) compressed by variable bit rate coding. Since the time search table shows a plurality of read addresses of a content, by dividing the content into a plurality of parts of a smaller size (e.g., no more than 8.4 minutes), the size of the time search table of each divided part of the content resultantly becomes smaller.

Due to this smaller size, the time search table is allowed to be resident in a portable playback apparatus with a smaller sized memory, even when the content is stored on the distribution medium in order to be moved from the first receiving to the second receiving apparatus. Then, the playback apparatus can effectively perform a forward or backward search by using the time search table. In this way, the present invention improves user convenience. It is a significant effect of the present invention that a playback apparatus is allowed to perform forward and backward searches of a content even when the content is stored in a plurality of parts on a distribution medium in order to be moved.

(3) The Claimed Invention

The present invention provides a distribution system for recording a copy of compressed audio content using variable-length encoding onto a recording medium and supplying the content to a playback apparatus. The present invention also provides a method, recording medium and computer program which perform the functions of the elements of the distribution system of the present invention.

The distribution system includes a distribution server which is operable to distribute the content via a network, a first receiving apparatus which is operable to receive the content via the network, and a second receiving apparatus which is operable to receive the content via the network.

The first receiving apparatus receives, via the network, a data set including the content and control information controlling copying of the content onto the recording

medium. The first receiving apparatus also generates authorization information showing whether moving the data set to another receiving apparatus (e.g., the second receiving apparatus) is permitted, and records the content onto a distribution medium together with corresponding usage rule information including (1) the authorization information and (2) the control information included in the data set.

The second receiving apparatus is operable to receive the content via the network. In addition, the second receiving apparatus is operable to receive the data set from the distribution sever via the network and hold the received data set. The second receiving apparatus includes a data set moving unit which is operable to read authorization information from the distribution medium, and (a) to move the data set from the distribution medium to the inside of the second receiving apparatus by removing the data set from the distribution medium and (b) hold the data set, only when the read authorization information shows that moving the data set is permitted.

Independent claims 1, 5 and 8-13 each recite the above-described novel features and effects of the present invention. In particular, independent claims 1, 5 and 8-13 each recite dividing a content into a plurality of object files, and recording and moving the plurality of object files together with the usage rule information of the content.

The distribution system of the present invention also provides that a recording unit of the first receiving apparatus is operable to record, into a rule management file provided in the distribution medium, the content as a plurality of contents together with corresponding rule information. Furthermore, the distribution system of the present invention provides that at least one of the plurality of contents is divided to be contained in a plurality of object files.

Accordingly, the present invention provides a distribution system in which a content is divided into a plurality of object files, the plurality of object files are recorded and moved together with the corresponding usage rule information of the entire content into the second receiving apparatus, and a copy of the content is then recorded on the recording medium which a playback apparatus uses to playback the content. Independent claims 1, 5 and 8-13 each recite this feature of the present invention.

Contrary to the Examiner's assertion, the Applicants respectfully submit that the applied references clearly fail to disclose or suggest the inventions of claims 1, 5 and 8-13 which include this feature of the present invention.

Hurtado et al. discloses a system for transmitting a content to a user after a license to play the content has been transmitted to a user device. The system of Hurtado et al. compresses and encrypts the content by using an encryption key, and decompresses the content by using the encryption key.

The system of Hurtado et al. also tracks usage of the content on the user devices by means of a logging site. Whenever the content is played by, or copied from, a content player which received the licensed content, information is transmitted to a logging site (clearinghouse). Hurtado et al. discloses that the logging site provides licensing authorization by enabling users to unlock content after verification of a successful completion of a licensing transaction, i.e., payment of a fee. A secure container (SC), in which the content is stored, then sends encrypted contents to a user who has made a successful completion of the licensing transaction for the content when an electronic digital content store 103 instructs the SC to issue the content to the purchasing user (see Column 13, lines 10-20). Hurtado et al. discloses that a content is encrypted within the SC but the storage and distribution of the content are separate from the control of the unlocking and use of the transmitted content. Hurtado et al. also discloses that a decryption key is transmitted to the user so that the user can unlock the encrypted content (see Column 10, lines 16-22).

In item 9 on page 3 of the Office Action, the Examiner asserted that Hurtado et al. discloses that at least a plurality of files contain divided parts of the content in Column 12, lines 39-67. It is important to note that this assertion is in contrast to the Examiner assertion in item 19 on page 7 of the Office Action, in which the Examiner acknowledges that Hurtado et al. (even in combination with Hall et al.) does not disclose or suggest "wherein the entirety of at least one of the plurality of contents is contained in a single object file, and at least one of the plurality of contents is divided to be contained in a plurality of object files."

Nevertheless, neither Column 12, lines 39-67 of Hurtado et al. nor any other portion of Hurtado et al. disclose or suggest that a content is divided into a plurality of object files, as recited in claims 1, 5 and 8-13.

Instead, Hurtado et al. merely discloses that the content, the content-related data or meta data, and an encryption key, which are separately generated, are packed in the SCs and stored in a content hosting site and/or a promotional web site. Even the broadest reasonable interpretation of Hurtado et al. cannot result in a conclusion that a content and data related thereto, which are separately generated, amount to dividing a content into a plurality of parts. Instead, the content data and the separately generated content-related data or meta data and encryption key are not divided parts of a content, as each of these data are separate from each other even though they may be packed into one SC.

Accordingly, despite the Examiner's assertion to the contrary, the Applicants respectfully submit that Hurtado et al. clearly does not disclose, suggest or even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in claims 1, 5 and 8-13.

Hall et al. discloses a descriptive data structure (DDS) that provides a rights management structure such as a secure container with associated information, i.e., content. The DDS describes, for example, the layout of the rights management data structure. An application program has an interpreter, and interprets the DDS. Based on the resulting interpretation, the application makes use of the content. Since the DDS provides an abstract representation of a rights management data structure, it is ensured that the rights management data structures are interoperable and compatible. Hall et al. also discloses that DDS may be distributed as a security container in the form of a recording medium. The DDS is used for rights management. However, it must be noted that an important aspect of Hall et al. is to provide rights management data structures that are interoperable and compatible with each other.

Nonetheless, Hall et al. clearly does not disclose, suggest or even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in each of claims 1, 5 and 8-13.

Iijima discloses a file management system for an IC card. An internal memory of the IC card has a plurality of data and key areas, which can be grouped by a concept referred to as a data file. A directory for managing files is divided into fixed-length fields, and definition information of the data files and areas is stored in each of the divided fields (see Figures 4 and 5). The definition information includes fixed information and variable information. The fixed information remains unchanged despite any change in corresponding files, whereas the variable information is dependent on a change in corresponding files.

Iijima does mention a process of “dividing.” However, what is divided in Iijima is not a content but the memory and the directory of the IC card. In particular, the memory is divided into a plurality of files, and the directory is divided into a plurality of fixed files. Iijima performs this procedure so that each of the fixed fields can store both fixed information and variable information of the files. In particular, this procedure is done because Iijima aims to provide a file management system in which a local distraction to the directory does not influence access to other non-destroyed information.

However, as described above, the present invention, as shown in Figure 17, divides a content having a certain length of playback time into a plurality of parts with each part having a predetermined playback time (e.g., 8.4 minutes) or shorter. Accordingly, in contrast to Iijima, the dividing of the present invention, as recited in each of claims 1, 5 and 8-13, has nothing to do with dividing a memory and/or a directory.

As described above, an object of Iijima is to provide a file management system in which a local distraction to the directory does not influence access to other non-destroyed definition information. However, Iijima does not aim to restrict the size of a time search table by dividing a content into a plurality of parts.

Consequently, Iijima taken in combination with Hurtado et al. and Hall et al. does not disclose, suggest or even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in each of claims 1, 5 and 8-13.

Nishikawa discloses a file control system which can reflect updated data in files of both a personal computer (PC) and a portable information terminal apparatus (PDA) when data has been updated in one of the PC and the PDA. FILE-A.xls refers to a file

stored in the PC, whereas FILE-A.pig refers to a file stored in the PDA. FILE-A.wlf associates the FILE-A.xls and FILE-A.pig files with each other. Nishikawa discloses that when either FILE-A.xls or FILE-A.pig is modified, the modification is reflected in FILE-A.wlf. FILE-A.xls and FILE-A.pig are modified based on FILE-A.wlf so that compatibility between these two files is maintained.

Accordingly, Nishikawa merely discloses a data exchange between two devices. However, what is exchanged in Nishikawa are the files of the PC and of the PDA to be updated, not the divided parts of a content and usage rule information of the content.

Consequently, Nishikawa, when taken in combination with Hurtado et al., Hall et al. and Iijima, clearly does not disclose, suggest or even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in each of claims 1, 5 and 8-13.

Therefore, in view of the above, Hurtado et al., Hall et al., Iijima and Nishikawa, either individually or in combination, clearly fail to disclose, suggest or even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in each of claims 1, 5 and 8-13.

With reference to In re Keller and In re Merck & Co., the Examiner asserts that one cannot show non-obviousness by attacking references individually where the rejections are based on the combination of references.

The Examiner is respectfully reminded that to establish *prima facie* obviousness of a claimed invention under 35 U.S.C. 103(a), all of the claim limitations must be disclosed or suggested by the applied prior art. See CFMT, Inc. v. YieldUp Int'l Corp., 349 F.3d 1333, 1342, 68 U.S.P.Q.2D 1940, 1946-47 (Fed. Cir. 2003); In re Royka, 490 F.2d 981, 985, 180 U.S.P.Q. 580, 583 (C.C.P.A. 1974).

As clearly demonstrated above, none of Hurtado et al., Hall et al., Iijima and Nishikawa even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in each of claims 1, 5 and 8-13.

Consequently, no obvious combination of Hurtado et al., Hall et al., Iijima and Nishikawa can result in the inventions of claims 1, 5 and 8-13 since Hurtado et al., Hall et al., Iijima and Nishikawa, either individually or in combination, clearly fail to disclose or suggest each and every limitation of claims 1, 5 and 8-13.

Furthermore, in addition to not disclosing each and every limitation of claims 1, 5 and 8-13, the Applicants respectfully submit that Hurtado et al., Hall et al., Iijima and Nishikawa are each directed to technological objectives that are different from the present invention. The Examiner is respectfully reminded that an obviousness rejection cannot be based on the resort of the Examiner to various non-pertinent references and the combination of *bits and pieces of the references* in light of the Applicants' claimed invention.

Accordingly, for at least the foregoing reasons, the Applicants respectfully submit that claims 1, 5 and 8-13 are clearly patentable over any obvious combination of Hurtado et al., Hall et al., Iijima and Nishikawa since Hurtado et al., Hall et al., Iijima and Nishikawa, either individually or in combination, clearly fail to disclose or suggest each and every limitation of claims 1, 5 and 8-13.

In item 56 on page 25 of the Office Action, claims 2-4 were again rejected under 35 U.S.C. § 103(a) as being unpatentable over Hurtado in view of Hall et al., Iijima and Nishikawa and further view of Coley et al. (U.S. 5,790,664) and Bendert et al. (U.S. 5,761,678). Furthermore, in item 72 on page 30 of the Office Action, claims 6-7 were again rejected under 35 U.S.C. § 103(a) as being unpatentable over Hurtado in view of Hall et al., Iijima and Nishikawa and further view of Shear et al. (U.S. Publication No. 2001/0042043).

As clearly demonstrated above, Hurtado et al., Hall et al., Iijima and Nishikawa fail to disclose or suggest each and every limitation of claims 1, 5 and 8-13. Furthermore, for the following reasons, the Applicants respectfully submit that the Coley et al., Bendert et al. and Shear et al. clearly fail to cure the deficiencies of Hurtado et al., Hall et al., Iijima and Nishikawa.

Coley et al. discloses a system involving attaching to a content a licensing system module that determines whether the content is validly licensed, whereby use of the content by an end user is managed. In particular, the licensing system module forms an

inquiry message as to the license record and sends the inquiry message to a database that is maintained by the content provider and that stores the records of valid licenses. In response to the inquiry message, the database returns a response message that is interpreted by the licensing system module. The licensing system module then enables or disables the use of the content according to the response message.

Bendert et al. discloses a technique for efficiently managing clones of an object group. A base storage area contains metadata for each of the multiple objects in object group. The metadata for each object identifies data within each object. A clone storage area contains an identification of the base storage area but not the metadata. When a subsequent request is made to update one of the objects, the metadata is copied to the clone storage area.

Shear et al. discloses that a control object defines plural rights management rules, such as a price for performance or rules governing redistribution. A secure software container can be used to protectively encapsulate a digital content and a suitable control object. Low capability platforms may enable only a part of the control rules, whereas higher capability platforms may enable all of the rules.

However, Coley et al., Shear et al. and Bendert et al. similarly fail to disclose or suggest or even contemplate that a content is divided into a plurality of object files, and that the plurality of objects files are recorded and moved together with usage rule information of the content, as recited in claims 1, 5 and 8-13.

Therefore, for the foregoing reasons, Coley et al., Bendert et al. and Shear et al. clearly fail to cure the deficiencies of Hurtado et al., Hall et al., Iijima and Nishikawa for failing to disclose or suggest each and every limitation of claims 1, 5 and 8-13.

Accordingly, no obvious combination of Hurtado et al., Hall et al., Iijima Nishikawa, Coley et al., Bendert et al. and Shear et al. would result in the inventions of claims 1, 5 and 8-13 since Hurtado et al., Hall et al., Iijima Nishikawa, Coley et al., Bendert et al. and Shear et al. clearly fail to disclose or suggest each and every limitation of claims 1, 5 and 8-13.

Therefore, claims 1, 5 and 8-13 are clearly allowable over Hurtado et al., Hall et al., Iijima Nishikawa, Coley et al., Bendert et al. and Shear et al.

Furthermore, it is submitted that the clear distinctions discussed above are such that a person having ordinary skill in the art at the time the invention was made would not have been motivated to modify Hurtado et al., Hall et al., Iijima Nishikawa, Coley et al., Bendert et al. and Shear et al. in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1, 5 and 8-13. Therefore, it is submitted that the claims 1, 5 and 8-13, as well as claims 2-4 and 6-7 which depend therefrom, are clearly allowable over the prior art as applied by the Examiner.

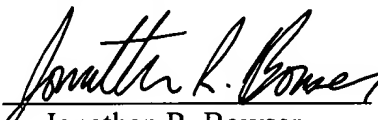
In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

A fee and a Petition for a two-month Extension of Time are filed herewith pursuant to 37 CFR § 1.136(a).

Respectfully submitted,

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